

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER <u>Unplanned</u>	Refiling <input type="checkbox"/>
ZONE TYPE SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input checked="" type="checkbox"/>

Date Received:
11/04/2016

Well Name: Bison 4-64 15-16 Well Number: 2BHZ

Name of Operator: BISON OIL & GAS LLC COGCC Operator Number: 10618

Address: 999 18TH STREET #3370

City: DENVER State: CO Zip: 80202

Contact Name: Abigail Wenk Phone: (720)644-6997 Fax: (303)974-1767

Email: awenk@bisonog.com

RECLAMATION FINANCIAL ASSURANCE
Plugging and Abandonment Bond Surety ID: 20160032

WELL LOCATION INFORMATION

QtrQtr: NWNE Sec: 15 Twp: 4S Rng: 64W Meridian: 6

Latitude: 39.708012 Longitude: -104.535477

Footage at Surface: <u>676</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>2235</u> Feet	<u>FNL</u>	<u>FEL</u>

Field Name: CHALICE Field Number: 10775

Ground Elevation: 5649 County: ARAPAHOE

GPS Data:
Date of Measurement: 07/14/2016 PDOP Reading: 1.6 Instrument Operator's Name: Owen McKee

If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: <u>650</u> Feet	FNL/FSL	FEL/FWL	Bottom Hole: <u>638</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>2164</u> Feet	<u>FNL</u>	<u>FWL</u>	<u>FNL</u> <u>242</u> Feet	<u>FNL</u>	<u>FWL</u>

Sec: 15 Twp: 4S Rng: 64W Sec: 16 Twp: 4S Rng: 64W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: Fee State Federal Indian

The Surface Owner is: is the mineral owner beneath the location.
(check all that apply) is committed to an Oil and Gas Lease.
 has signed the Oil and Gas Lease.
 is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Township 4 South, Range 64 West, 6th PM
Section 16: ALL

Total Acres in Described Lease: 640 Described Mineral Lease is: Fee State Federal Indian

Federal or State Lease # 80/5587-S

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2365 Feet
Building Unit: 2678 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 2238 Feet
Above Ground Utility: 685 Feet
Railroad: 5280 Feet
Property Line: 673 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: Buffer Zone
 Exception Zone
 Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 155 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 300 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

The BHL footage FWL of Section 16 depicted on the well location plat is less than the required 300' from unit boundary per Spacing Order 535-738. Operator will not be completing the well past 300' FWL of Section 16.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	535-738	960	15-W/2, 16-ALL

DRILLING PROGRAM

Proposed Total Measured Depth: 15026 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: 547 Feet No well belonging to another operator within 1,500 feet

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: Annular Preventor Double Ram Rotating Head None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
CONDUCTOR	26	16	1/4	0	100	10	100	0
SURF	13+1/2	9+5/8	36	0	2042	670	2042	0
1ST	8+1/2	5+1/2	20	0	15026	1710	15026	1900

Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

Rule 318.c. Exception Location from Rule or Spacing Order Number _____

Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments

This well was permitted to be a Niobrara B well, but during drilling, the wellbore encountered a complex fault which resulted in an unplanned sidetrack into the Niobrara C.

We reached a depth of 11703' in the wellbore being plugged back.

Casing Set - 9 5/8" CSG at 2042'.

This was an open hole sidetrack with no fish or plugs.

No cement was needed to plug.

Measured depth of proposed sidetrack kick-off point is 9638'.

We will be keeping the same planned target as the wellbore being abandoned, Niobrara B.

Bison's engineering staff received verbal plugback/sidetrack approval from COGCC Engineer Diana Burns on 11.3.16.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: _____

Is this application being submitted with an Oil and Gas Location Assessment application? _____ No _____

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Abigail Wenk

Title: Regulatory Manager Date: 11/4/2016 Email: awenk@bisonog.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: *Matthew Lee* Director of COGCC Date: 11/21/2016

Expiration Date: 11/03/2018

API NUMBER
05 005 07255 01

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

COA Type

Description

--	--

Best Management Practices

No BMP/COA Type

Description

--	--

Applicable Policies and Notices to Operators

Policy

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

Att Doc Num

Name

401142551	APD APPROVED
401142677	OffsetWellEvaluations Data
401142943	CORRESPONDENCE
401143255	WELLBORE DIAGRAM
401143680	OFFSET WELL EVALUATION
401143681	FORM 2 SUBMITTED
401143682	PUBLIC COMMENT-0

Total Attach: 7 Files

General Comments

User Group

Comment

Comment Date

Permit	This is an unplanned sidetrack for API 005-07255-00. Added -01 extension to API# to create sidetrack API. Permit review complete.	11/04/2016
Permit	LGD and public comment periods waived by COGCC staff. Comment periods do not apply to this application for an unplanned sidetrack when drilling is in progress.	11/04/2016
Permit	Passed completeness.	11/04/2016

Total: 3 comment(s)